

Amendments to the Claims

A 2  
Claim 1 (Currently amended): A method for activating and modulating the immune system of an animal comprising:  
growing bacteria in a medium;  
exposing said bacteria to biological, chemical or physical stress for at least one period of time of 20 minutes or less so that the bacteria release a stress response product comprising stress response factors (SRFs);  
separating said medium and stress response product from said bacteria to form a separated product;  
filtering said separated product to remove substances ~~any~~ stress response products having a molecular weight of greater than 10kDa to form a filtrate;  
administering said filtrate to said animal.

Claim 2 (Original): The method of claim 1 wherein said step of stressing comprises reducing the bioavailability of nutrients to said bacteria.

Claim 3 (Original): The method of claim 2 wherein the bioavailability of nutrients is reduced by transferring the bacteria from a nutrient-rich media to a non-nutritive media.

Claim 4 (Currently amended): The method of claim 3 wherein said non-nutritive media comprises saline at pH values of 6.0 to 8.0.

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Claim 5 (Currently amended): The method of claim 4 wherein said saline media is a phosphate-buffered saline having a pH of about 7.6 7.0.

Claim 6 (Currently amended): The method of claim 1 wherein the bacteria is are selected from the group consisting of Lactobacillus, Staphylococcus, Streptococcus, Pediococcus, Pseudomonas, Bacillus, Escherichia, Listeria, Enterococcus, and Klebsiella.

Claim 7 (Currently amended): The method of claim 6 wherein the bacteria is are selected from the group consisting of *L. acidophilus*, *L. casei*, *L. fermentum*, *L. plantarum*, *L. monocytogenes*, *S. aureus*, *S. typhimurium*, *P. acidolactici*, *B. coryneforme*, *E. coli*, *E. faecium*, *S. pyogenes*, and *K. pneumoniae*.

Claim 8 (Currently amended): The method of claim 1 wherein the bacteria are propagated at a temperature of 37°C or less ranging from approximately 22°C to approximately 37°C.

Claim 9 (Canceled):

Claim 10 (Currently amended): The method of claim 1 wherein the bacteria are exposed to a stress while they are in the stationary phase of their life cycle.

Claim 11 (Currently amended): The method of claim 1 wherein the filtering step includes: passing said separated product through a 0.22  $\mu\text{m}$  filter to form a sterilized product; and passing said sterilized product through a filter with a molecular weight cutoff of 10,000 10 kDa.

A 4  
Claim 12 (Currently amended): The method of claim 1 wherein the filtrate containing the stress response factors (SRFs) SRFs <10kDa is administered to an animal selected from the group consisting of humans, poultry and livestock.

Claim 13 (Currently amended): The method of claim 1 wherein the stress response product is administered in a concentration of about 1000 to 50,000 AU of said stress response product/ml, corresponding to a reading at 254 nm in the UV range of light wherein the concentration of the stress response factors gives an Optical Density of 1.0 to 5.0.

Claim 14 (Original): The method of claim 1 wherein the stress response product is administered in a manner selected from the group consisting of orally, topically, and parenterally.

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**Claim 15 (Currently amended):** The method of claim 1 wherein the animal is administered stress response products having a size weight of between 0.5 and 3 kDa.

**Claim 16 (Original):** The method of claim 1 wherein the stress response products are administered as an adjuvant for oral or parenteral vaccines.

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**Claim 17 (Currently amended):** The method of claim 1 wherein the bacteria are exposed to sequential periods of stress of approximately 10-20 minutes.

**Claim 18 (Original):** The method of claim 17 wherein the bacteria are exposed to sequential periods of stress by transferring the bacteria from growth media into non-nutritive media, then subsequently transferring the bacteria to non-nutritive media sequentially.

**Claim 19 (Original):** The method of claim 18 wherein the bacteria is exposed to three sequential periods of stress.